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PHOTOGRAPHIC INTERPRETATION REPORT

ICBM LAUNCH COMPLEX
KOSTROMA, USSR

NPIC/R-8/63
February 1963

NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER

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INTRODUCTION

An ICBM complex consisting of five launch areas, a complex support facility, and a rail-to-road transfer point is located in a forested area northeast of Kostroma (Figure 1). The launch areas are served by access roads leading from the Kostroma-Buy highway and are dispersed

over an area of about 18 nautical miles (nm) in an east-west direction. Rail service to the transfer point is provided by a spur line from the Kostroma-Galich rail line. Two SA-2 SAM sites are deployed in the general area of the complex. One is located adjacent to Kostroma Airfield at

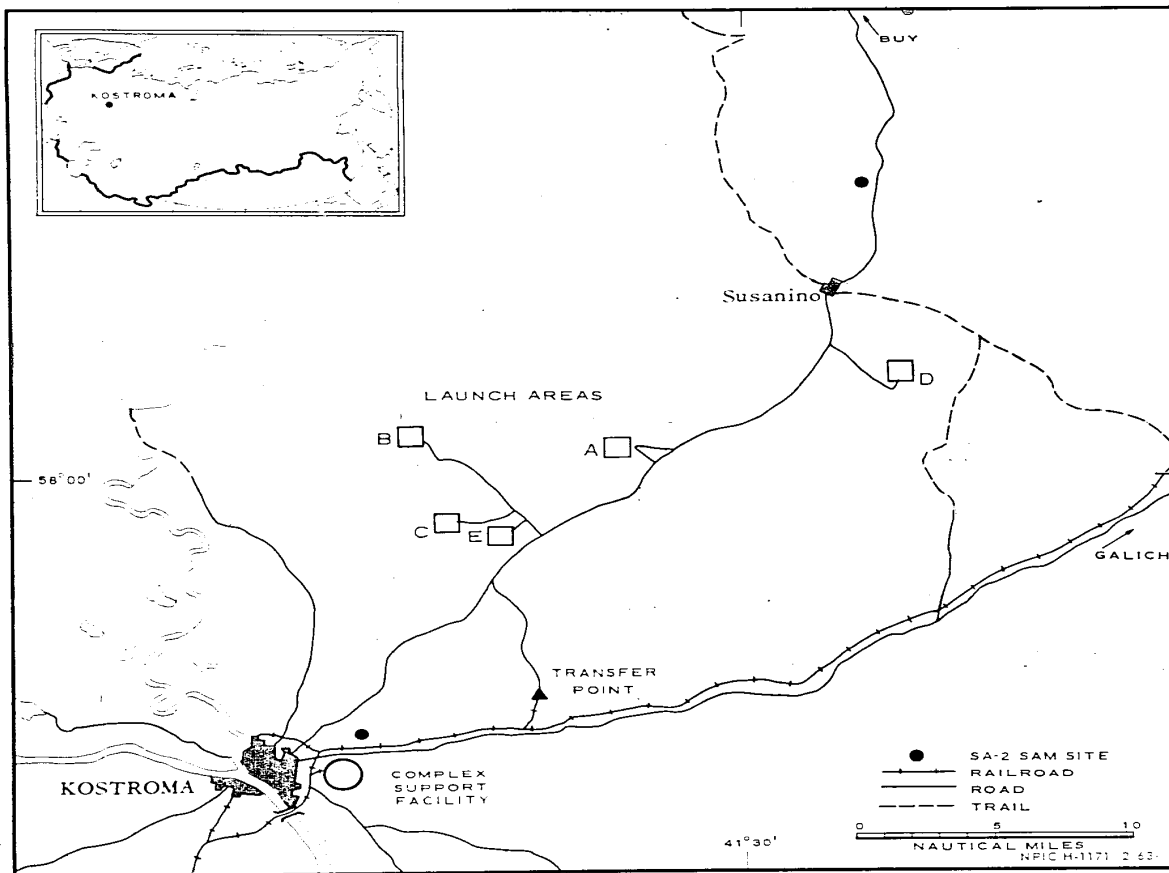


FIGURE 1. LOCATION OF KOSTROMA ICBM LAUNCH COMPLEX.

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57-48N 41-03E, and the other along the Kostroma-Buy highway at 58-14N 41-38E. All measurements contained in this report are approximate.

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LAUNCH AREAS

Four of the launch areas (A, B, C, and D) have a Type II (Mod b) configuration with a ready building to the rear of each launch pad and all are oriented on an azimuth of 295 degrees, ± 5 degrees. Launch Area E has a Type III configuration and is under construction. Power traces are evident to all launch areas.

LAUNCH AREA A

Launch Area A is located approximately 15 nm by road from the transfer point and 1.3 nm north of the Kostroma-Buy highway. It was first seen in [] and construction is now complete. 1/ The access road enters the launch area to the right of center to service the launch pads and missile-ready buildings (Figure 2). The ready building to the rear of the right pad measures about 170 by 125 feet and is canted at an angle to the long axis of the launch pad. The ready building to the left, 170 by 105 feet, is in line with the launch pad. Three buildings are positioned along a line through the center of the launch area to the left of the access road. The structure at the forward end of the launch area appears to be roughly L-shaped with an unidentified object on top. The center structure, probably the control building, is 105 by 85 feet. To the rear of it is a slightly smaller building with a low object atop one corner. A horizontal structure, probably a missile-erecting device

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approximately 100 feet long, is centered on each launch pad. In [] a vertical object at the forward end of the structure on the left pad casts a short, faint shadow. A probable vehicle stall is located just to the outside of the pads. One other structure is located just off the road halfway between the right ready building and the launch pad. A security building is located alongside the road as it enters the launch area.

In [] the launch support facility for Launch Area A contained at least six completed structures, four of which were 150 feet long, and foundations and construction for four additional buildings. About 5,600 feet to the southeast is a housing and construction camp containing 25 to 30 buildings and structures. Nine of these buildings, which are 120 feet long, probably are barracks.

LAUNCH AREA B

Launch Area B is located about 16 nm from the transfer point and 7 nm from the Kostroma-Buy highway and is considered complete, although only the ready building, 170 feet long, behind the left pad has been constructed (Figure 3). It is canted at an angle to the long axis of the launch pad in the same direction as the one at Launch Area A. For some unexplained reason, the side edges of the roof of this completed building appear wider than that of other ready buildings. The width of the building could not be

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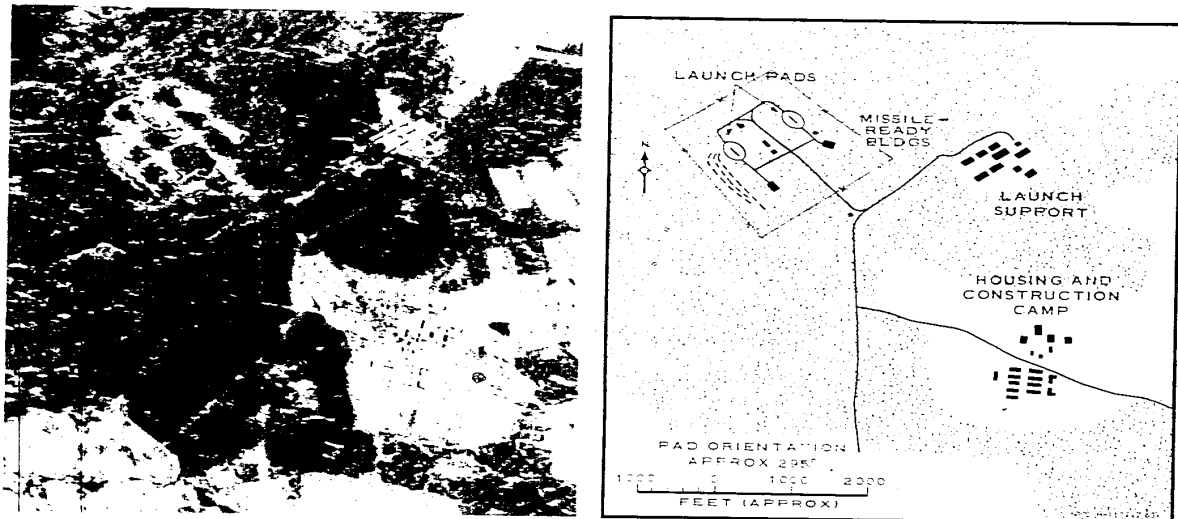


FIGURE 2. LAUNCH AREA A AS OF [redacted]

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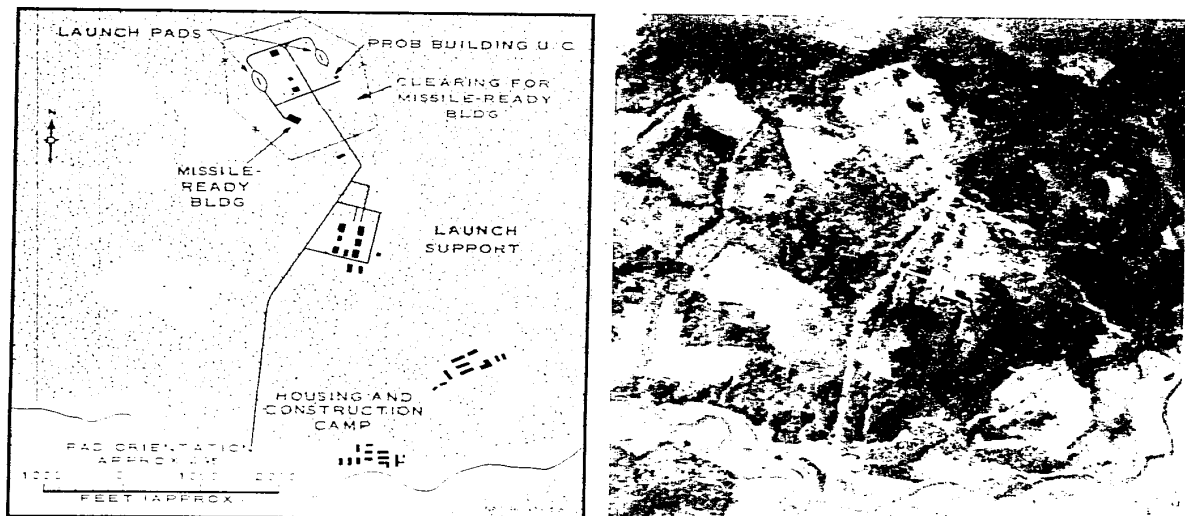


FIGURE 3. LAUNCH AREA B AS OF [redacted]

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determined. Only a cleared and scarred area, in line with the launch pad, was visible behind the right pad in [redacted] Horizontal structures are positioned in the center of the launch pads. A vertical object was located at the forward end of the structure on the left pad in [redacted] This object casts a heavier and longer shadow than the one at Launch Area A. The estimated height of this object is 95 feet, ± 10 feet. A probable vehicle stall is located to the outside of the pads.

Three buildings are aligned through the center of the launch area to the left of the access road. Possibly a fourth structure under construction or a low earth-covered structure was evident in [redacted] The building at the forward end of the site is approximately 125 by 100 feet, and the two further to the rear are slightly smaller and of a somewhat irregular shape. Another structure was under construction to the outside of and at right angles to the road between the right launch pad and the clearing for the ready building. A probable security building is located near the access road as it enters the launch area. Eight to 10 pieces of equipment were evident on the access road through the launch area and near the left pad in [redacted]

The launch support facility for Launch Area B containing at least 10 buildings is located about 2,500 feet to the rear of the launch area. Seven of these buildings, ranging in length from 110 to 125 feet and of varying widths, are laid out in a U-shaped pattern similar to that of some other launch support facilities.

To the rear of the launch support facility along a small stream are two additional support areas. One of these probably is a construction camp containing 9 to 12 buildings of varying sizes, 3 of which are 130 feet long. Adjacent to this camp is a cleared and scarred area that may be used for parking of equipment. A housing area nearby consists of 12 buildings of varying sizes, 5 of which are 120 feet long.

LAUNCH AREA C

Launch Area C is located about 11 nm by road from the transfer point and 2.9 nm from the intersection of the road to Launch Area B. The launch area was in the midstage of construction as of [redacted] One missile-ready building, 170 by 125 feet, appears complete behind the right launch pad and canted at an angle to the long axis of the pad (Figure 4). In [redacted] the left ready building, which will be in line with the pad, appeared to be in an early stage of construction. Construction of launch pads and the roads within the launch area was not complete in [redacted] Two objects, each about 90 feet long, were evident on the left pad. A probable control building, 85 by 95 feet, is centrally located just to the rear of a scar between launch pads. Just forward of this is a foundation [redacted] 100 by 50 feet. Two other small structures, probably construction sheds, are within the launch area.

The access road enters the launch area from a southwesterly direction at right angles to the launch pads. An intersecting road through the area is offset to the right of center. This road terminates in the woods to the rear of the launch area with a small structure at the terminus. A similar arrangement of a road and structure in the same location are observed at Launch Area C of the Teykovo ICBM Launch Complex. 2

Three buildings, 125 by 40 feet, have been constructed at the launch support facility for Launch Area C south of the launch area. Clearings for other structures and at least one other building under construction were evident in [redacted]

The initial construction camp is located to the northwest and forward of the launch area. This building area for housing and support of construction workers contains at least 15 structures, eight of which appear to be barracks-type buildings about 100 feet long.

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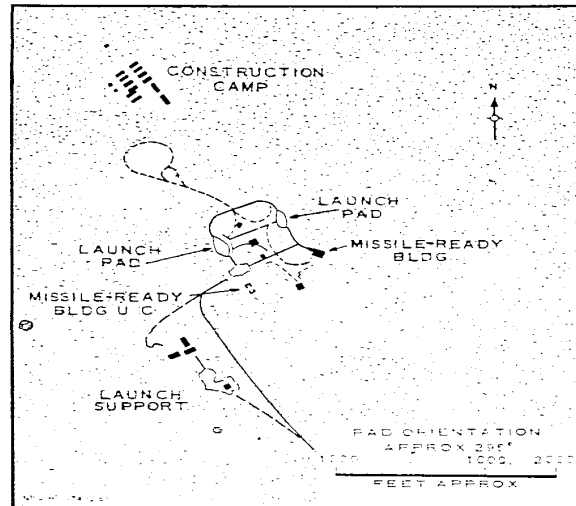
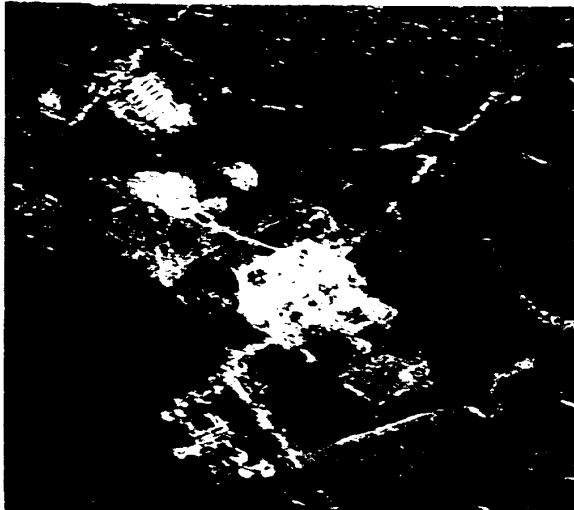


FIGURE 4. LAUNCH AREA C AS OF [REDACTED]

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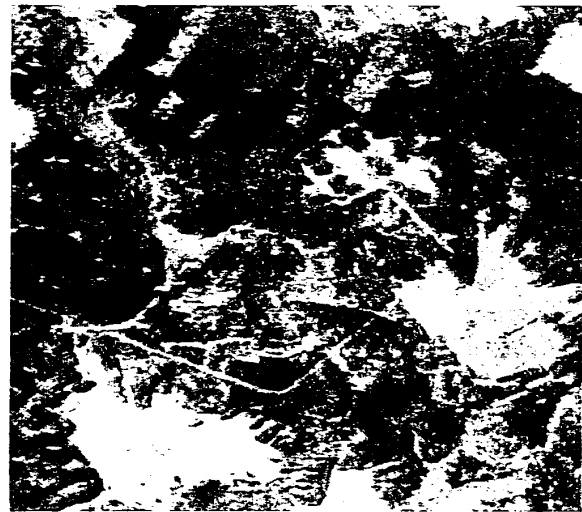
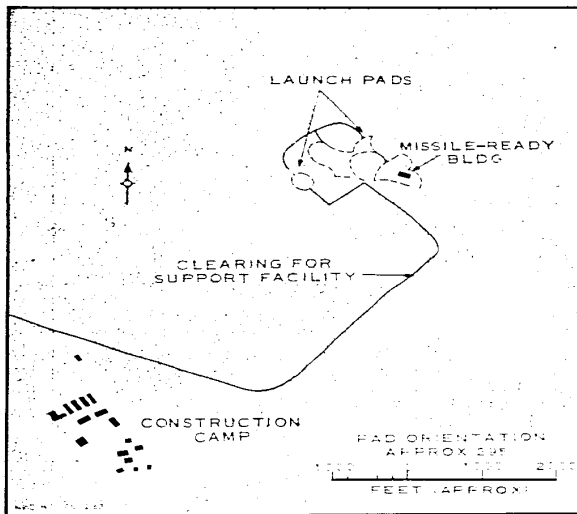


FIGURE 5. LAUNCH AREA D AS OF [REDACTED]

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LAUNCH AREA D

25X1D Launch Area D, in a midstage of construction, is located approximately 23 nm by road from the transfer point and 3.9 nm from the Kostroma-Buy highway. The general signature was evident in [] from the clearings for the loop road system and a missile-ready building, but no structures were evident within the launch area (Figure 5). One ready building had been constructed behind the right pad at an angle to the long axis of the pad as of late []. Because of poor photography the dimensions of the building cannot be determined.

25X1D A cleared area, just south of the point where the access road turns toward the launch area, probably will be the location of the launch support facility for Launch Area D. A construction camp of at least 17 structures of various sizes is located near the access road to the southwest of the clearing for the support area.

LAUNCH AREA E

Launch Area E has the Type III, silo configuration and is located about 11 nm by road

from the transfer point. There was no evidence of this area on []. On photography from [] a road and clearing in the woods were evident, []. The similarity to other Type III areas became evident on photography from [] with the appearance of a clearing 650 feet long and the start of an excavation approximately 440 feet long (Figure 6). The short axis of the excavation is oriented on an azimuth of approximately 300 degrees. A line of trees remains along the south edge of the excavation. One probable structure is located south of the excavation near the terminus of a power trace. Late in [] on photography from [] the east end of the excavation appeared to have been squared off, and possibly two objects are now within the excavation. There was still no evidence of a notch in the side of the excavation.

RAIL-TO-ROAD TRANSFER POINT

The rail-to-road transfer point is located in a wooded area about 10 nm northeast of the complex support facility. A branch line from the Kostroma-Galich rail line extends 2.3 nm north to serve the transfer point (Figure 7). A well-engineered road from the Kostroma-Galich highway parallels the branch rail line to the transfer point and then continues north to intersect with the Kostroma-Buy highway. From this intersection the existing highway is utilized as the complex main road.

The branch rail line terminates in three spurs in a wooded area at the transfer point. The spur extending furthest to the north lies ad-

acent to a loop road pattern. The two other spurs appear to terminate slightly to the south.

A housing area is located along the west side of the road and rail and contains about 20 buildings. Eight of these appear to be multistory and about 130 feet long. The remainder are smaller barracks-type buildings. South of the housing area is an area probably utilized for open storage of equipment and supplies. It appears to be fenced and contains one warehouse-type structure 205 feet long and four smaller buildings.

South of the terminus of the rail spurs that constitute the transfer point are two other rail spurs curving to the east which were previously

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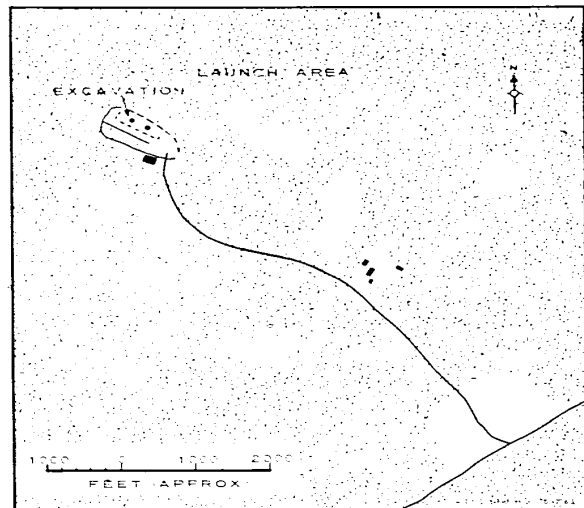


FIGURE 6. LAUNCH AREA E AS OF

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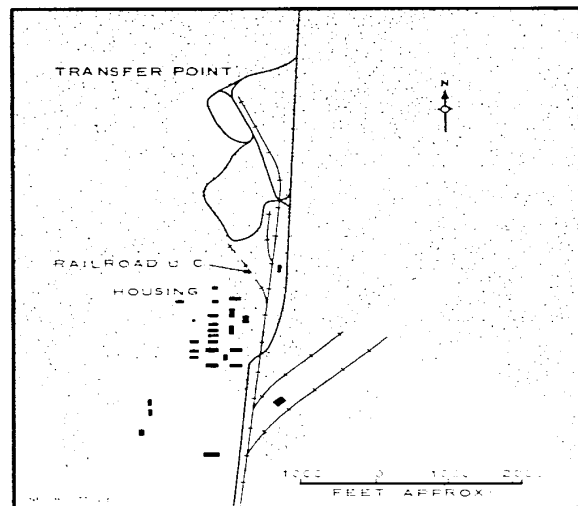


FIGURE 7. RAIL-TO-ROAD TRANSFER POINT AS OF

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identified as the transfer point. These spurs, however, appear to be for logistic and construction support as evidenced by the absence of

a good road net from the spurs and the presence of a concrete batching plant near one spur.

COMPLEX SUPPORT FACILITY

25X1D The complex support facility is located on the eastern edge of Kostroma and is road and rail served. There was no evidence of this facility on photography of [] except for a portion of the road which enters from the Kostroma-Galich highway. This road was either under construction or an existing road was being lengthened to serve the installation. A small structure near the intersection with the highway probably serves as a security checkpoint. The support facility encompasses an area approximately 4,500 by 2,600 feet and appears basically unchanged since [] (Figure 8).

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Rail service is provided by a spur branching

from previously existing spurs to a nearby industry. This spur passes through a rectangular fenced area, probably used for open storage, then subsequently branches into five spurs within the support facility.

The support facility contains about 62 buildings and structures and a probable concrete batching plant. At least 20 buildings appear to be for housing and the remainder for storage and other undetermined function. There do not appear to be any rail-through buildings. The facility probably is surrounded by a fence which cannot be seen in its entirety.

COORDINATES OF FACILITIES

| | |
|-----------------------------|---------------|
| Complex Support Facility | 57-46N 41-01E |
| Rail-to-Road Transfer Point | 57-51N 41-15E |
| Launch Area A | 58-02N 41-21E |
| Launch Area B | 58-02N 41-07E |
| Launch Area C | 57-59N 41-09E |
| Launch Area D | 58-05N 41-40E |
| Launch Area E | 57-57N 41-13E |

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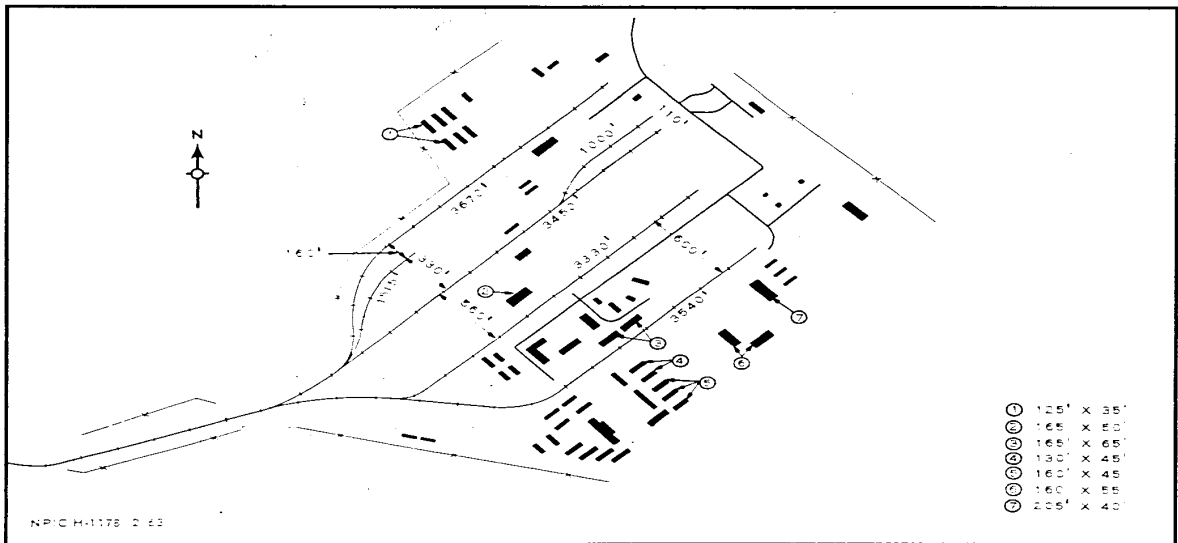


FIGURE 8. COMPLEX SUPPORT FACILITY AS OF

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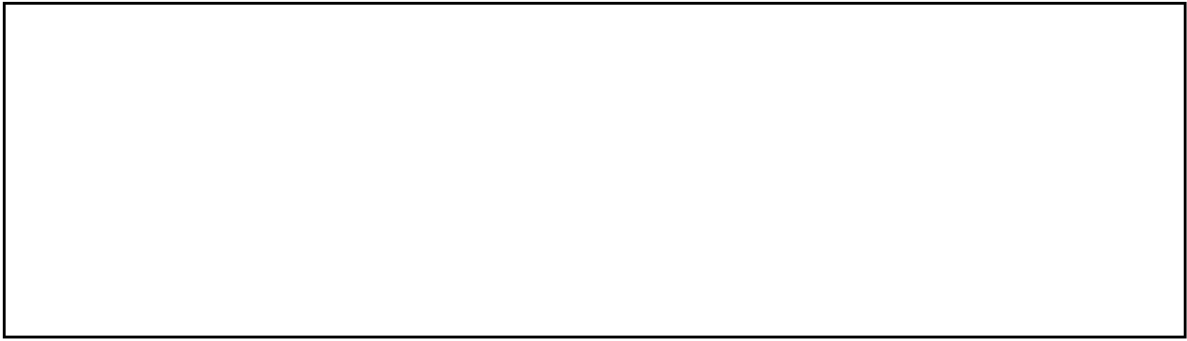
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REFERENCES

PHOTOGRAPHY



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MAPS OR CHARTS

- ACIC. ONC 154, 1st classified ed, Jun 59, scale 1:1,000,000 (CONFIDENTIAL)
- SAC. US Air Target Chart, Series 200, Sheet 0154-9A, 1st ed, Nov 58, scale 1:200,000 (SECRET)
- AMS. Series N501, Sheet 37-6 (Danilov), 2d ed, Mar 56, scale 1:250,000 (UNCLASSIFIED)
- AMS. Series N501, Sheet 37-9 (Kostroma), 2d ed, Mar 57, scale 1:250,000 (UNCLASSIFIED)

DOCUMENTS

1. NPIC. B-18 61. Possible ICBM Launch Site Near Kostroma, USSR, Aug 61 (TOP SECRET CHESS RUFF)
2. NPIC. R-125 62. ICBM Complex, Teykovo, USSR, Aug 62 (TOP SECRET CHESS RUFF)

REQUIREMENT

CIA. DDI RR E R-48 62

NPIC PROJECT

JN-121 62

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